

should be given; and if⁴
I ~~had~~^{could have} my wish, a small
figure should stand at the
head of each specific descrip-
-tion, which would at a
glance show the most striking
feature of the species - as compared
with other species of the same
genus. Often the mere outline
of a leaf or perianth, or something
else equally simple would be
sufficient to do this.

I hardly know how much space
the Hepaticaria will occupy. We
have about 200 species. The
number of genera - a matter resting
a good deal upon the fancy of au-
-thors, it seems - will be not far
from 40: - I see Drummond makes
69 the number in his Hepat. Europ.
I should say that an average of a genus
and four species to a page would

Closter, N.J. Jan. 31. 1875.

Dear Dr. Gray

Thanks for your

kind wishes.

: Glad to hear that the
Manual of Mosses is getting
along towards completion.
It will supply one of my
own greatest needs in the
study of our Musci.

I have
done nothing with the Hepaticaria
Manual since last winter,
for the reason that I then
got in a grand way about the
proper nomenclature, and have
not yet extricated myself from
it. I was then expecting, and
have since received some of
Lindberg's recent publications,
which I earnestly hoped would
enable me to get out ~~of~~ and
pursue the right track.

But I find him often wavering as if halting between two opinions. I have also lately rec'd a copy of Dumortier's "Hepaticæ Europæ" which gives, ~~as~~ when taken in connection with Synops. Hepaticarum of Nees Lindenberg & Gottschalk, and ~~with~~ Lindberg's recent publication, a 'muchly' muddled or confused expression to the whole subject. Since the publication of Synop. Hepat. - and indeed quite recently - there seems to have been made a "new deal all round" the genera of Nees have been cut and carved and the pieces shifted about in a manner ^{many of his names have been changed and} truly perplexing; his 'Order of Arrangement' has also been turned topsy-turvy. This would all not be so bad but for the fact that no two modern authors come

much nearer to agreeing with each other than either does with Nees. Nees' system is undoubtedly erroneous - or at least subject to improvement in some respects, but the trouble with me is just when to draw the line. Perhaps you can give me some valuable hints on this point.

I think that the Musci & Hepaticæ Manuals should be got up as separate works; but for the convenience of students they should be bound together.

Your 'financial' part of the plan is satisfactory.

How about plates $\frac{1}{2}$ representing the different genera? These

Cassius is the oldest name. Acoela comes next.

But Dumortier's system of arrangement of the genera is very unnatural and unscientific; and were it not for the fact that Lindberg ^{now} ~~sometimes~~ adopts one name and then another I should not hesitate to adopt his whole system - names and all.

In choosing names for the different organs of the plants, I see that the terms perianth, involucere, inflorescence, pedicel and some others of Sullivan's mosses will probably have to be changed for

Colesula perichaetium gamoi-
-um seta, &c. that is if Lindberg is to be taken as a guide.

Very truly yours

P.S. I hope to be able to complete the work before May next.

Co. H. Austin

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not be far out of the way - say 50 pages (yet I think 40 pages will prove ample). Then say 4 pages for analytical key. 4 for descriptions of plates and 15 ~~or 10~~ for index. Besides there should be a short introductory preface and about a page of matter generally descriptive of the whole subject - defining of terms, &c.

One plan that I have adopted in the descriptions, is the com-
parison and contrasting of close
allied species and forms; because I deem it of paramount importance to students!

I have the Taylor Hepaticae yet, I hope you will allow me to retain them ~~for~~ this winter. They have already been of great service to me, and I am constantly referring to them.

6/ The great work now to be done with Hepaticae is not ^{to describe} ~~to describe~~ new species, but to correctly describe and "cut down" old ones. Many of Taylor's descriptions are ridiculously ambiguous and often very erroneous: besides he has not infrequently made as many as 3 to 5 "N. N." out of one old and well known one - Confounded distinct species, &c.

There are ^a great deal too many species in the books, - very likely ~~to~~ an average of two when there is but one in actual existence. The tendency of European Hepaticologists seems to be to keep up this illusion - at least this is the case with Dumortier. Lindberg is more exacting - and appears to be governed ~~rather~~ more by an earnest desire to place the

science on a correct and lasting basis than any other author known to me.

Have you seen Lindberg's "Gen. Europ. Hepat. Secundum novam Disp. Nat."? If not I will send you a copy. It shows deep study and excellent judgement, and I believe is about as near to perfection as it can be made in the present stage of the science. I am somewhat in doubt, however, as to the propriety of adopting all of his generic names, in preference to the often numerous others which have claims to our attention. e.g. he adopts "Caesia B. Gray." in the place of *Gymnomitrium* Corda, Nees. and I see that Dumortier still holds to "*Acobea Dum.*" on the ground that "*Caesius*" (not "*Caesia*") "is the name of a ~~Man~~ - not of a plant." &c.